U.S. Department of the Interior
Bureau of Land Management

Glenwood Springs Field Office
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ROAN PLATEAU ELIGIBILITY REPORT For the NATIONAL WILD AND SCENIC RIVERS SYSTEM

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
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IN REPLY REFER TO:

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September 25, 2002

MEMORANDUM

To: Steve Bennett, Acting Glenwood Springs Field Manager

From: Kay Hopkins, Outdoor Recreation Planner

Subject: Roan Plateau Eligibility Report for the National Wild and Scenic Rivers System

This memo is forwarding the final Roan Plateau Eligibility Report for the National Wild and Scenic Rivers System. This report was prepared and completed by a BLM interdisciplinary team and is ready to be released for public comment as part of the Roan Plateau planning process.

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Enclosure(s): Roan Plateau Eligibility Report for the National Wild and Scenic Rivers System,
Dated May 2002

ROAN PLATEAU
WILD AND SCENIC ELIGIBILITY REPORT
May 2002

Introduction

As part of the planning process for the Roan Plateau Resource Management Plan (RMP), a BLM interdisciplinary study team completed a Wild and Scenic Rivers (WSR) study under Section 5(d)(1) of the Wild and Scenic Rivers Act (WSRA). This study reviewed all BLM -administered public land surface along rivers and streams within the planning area, evaluated and made determinations regarding a river/streams eligibility, and gave preliminary classifications to those river/streams that were found eligible as identified in the WSRA. This assessment will not complete the suitability portion of the study process on any of the rivers/streams. A suitability study will be conducted at a later date with separate NEPA analysis.

This study report: 1) discusses the definition of free-flowing and whether or not the study rivers fits that definition; 2) gives the criteria for evaluating outstandingly remarkable values; and describes resource values and, assess each of them, and determines what resource values are outstandingly remarkable 3) determines preliminary classification for all eligible rivers.

Purpose
The Wild and Scenic Rivers Act was passed by Congress in 1968, instituting a legislative program to study and protect free-flowing river segments by making them part of the National Wild and Scenic Rivers System (NWSRS). Congress did not intend to protect every remaining free-flowing American river, but rather sought to conserve a representative sample of many of our most important natural and recreational rivers.

Directives in BLM Manual 8351 and "The Wild and Scenic River Study Process" technical report prepared for the Interagency Wild and Scenic Rivers Coordinating Council, 1999, were followed for integrating a wild and scenic river study within the resource management planning process. For the purposes of the this study, a river is defined as: flowing body of water, or estuary, or section, portion, or tributary thereof, including: rivers, streams, creeks, runs, kills, rills, and small lakes.

Study Boundaries
All rivers within the Roan Plateau planning unit were evaluated under the eligibility criteria, but only those that meet the free flowing criteria and that had the presence of outstandingly remarkable values received intensive study. The study analyzed 31 perennial streams (64 miles) within the planning area **(See Map # 2).**

The river's special values were assessed as to whether they are unique, rare or exemplary within the state, physiographic province, eco-region, or other is of comparison. For purpose of the Roan Plateau planning unit and in order to better define the evaluation criteria" regionally significant" the "region" the following eco-regions were used: Utah High Plateau's and the Southern Rocky Mountains **(See Map # 1).**.

The boundaries of any river proposed for potential addition to the NWSRS, as specified in section 4(d) of the Wild and Scenic Rivers Act, are usually limited to that area measured within one-quarter mile of the ordinary high watermark on each side of the river. Within the Roan Plateau planning area, analysis has been limited to that boundary on all river segments, except on the western portions of East Fork of Parachute Creek were the boundary was increased to include "outstandingly remarkable" scenic values.

Basis for Determination

To be eligible, a river segment must be: 1) Free flowing and within its immediate environment, and 2) must possess one or more river-related value considered to be "outstandingly remarkable". These factors are summarized in the chart below and further described and analyzed in the document. Other factors are considered in determining suitability**.**

Eligibility Determination Summary Chart

Must be a:
River which is defined as:
flowing body of water, or
estuary, or
section, portion, or tributary thereof, including:
- rivers,
- streams,
- creeks,
- runs,
- kills,
- rills,
- and small lakes

Must be:
Free-flowing, which is defined as:

Existing or flowing in a natural condition without:
- impoundment, with exceptions (low dams, diversion works and other minor structures)
- diversion
- straightening
- rip-rapping, or other modification of the waterway (channelization)

Add can:
- be any size/length
- lie between impoundments or major dams
- be non-floatable/non-boatable
- be intermittent/non-perennial

And must possess at least one outstandingly remarkable value, i.e.:
Scenic
Recreational,
Geologic,
Fish and Wildlife,
Historic,
Cultural, or
Other similar values, such as:
- Biological,
- Botanical,
- Ecological,
- Hydrological,
- Paleontological

I. Free Flowing Criteria

Free flowing is defined by Section 16(b) of the Wild and Scenic Rivers Act as "existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence of low dams, diversion works, or other minor structures at the time of evaluation does not automatically disqualify a stream from consideration. The following findings are for 31 perennial streams that were evaluated **(See Map # 2)** for the free flowing criteria by a interdisciplinary study team:

RIVER/STREAM NAME	FREE FLOWING CRITERIA-NATURAL CONDITION	RIVER/STREAM NAME	FREE FLOWING CRITERIA-NATURAL CONDITION
Government Creek	NO	Bull Gulch	YES
Trapper Creek	YES	Forked Gulch	NO
Northwater Creek	YES	West Forked Creek	YES
1. Northwater Branch	YES	Cottonwood Creek	YES
2. Northwater Branch	YES	Goodrich Creek	YES
3. Northwater Branch	YES	Thirty two mile Creek	NO
4. Northwater Branch	YES	Corral Gulch	YES
Tichner Creek	YES	First Anvil Creek	YES
Yellow Jacket	YES	First Anvil Branch	NO
Raspberry Creek	YES	Second Anvil Creek	YES
Ben Good Creek	YES	East Middle Fork Parachute Creek	YES
East Fork of Parachute Creek	YES	Second Water Creek	NO
JQS Gulch	YES	Third Water Creek	NO
JQS Branch	YES	Timber Gulch	YES
Golden Castle Gulch	YES	JV Gulch	YES
First Anvil Creek	YES	Sheep Trail Hollow Creek	NO

Findings Summary: 7 streams were found **not** to meet the free-flowing criteria, 24 streams did meet the criteria**.**

II. Outstandingly Remarkable Values (ORVs)

The determination that a river area contains ORVs is a professional judgment on the part of the interdisciplinary study team (IDT), based on objective, scientific analysis. In order to be assessed as outstandingly remarkable, a river-related value must be a unique, rare, or exemplary feature that is significant at a comparative regional or national scale. Dictionary definitions of the words "unique" and "rare" indicate that such a value would be one that is conspicuous example from among a number of similar values that are themselves uncommon or extraordinary.

The study team looked at 64 miles on all 31 streams shown above and listed all of the river's special values and then assessed whether they were unique, rare or exemplary within the state, physiographic province, eco region, or the other area of comparison. Only one such value is needed for eligibility. Out of the original list of 31 streams, 8 streams were identified for further analysis and are discussed in greater detail below. These streams were further analyzed based on the presence of outstandingly remarkable values. The streams that were analyzed in greater detail are: Trapper Creek, Northwater Creek, East Middle Fork Parachute, East Fork of Parachute Creek, First Anvil Creek, Second Anvil Creek, Golden Castle Gulch, and JQS Gulch.

The values, which must be directly river-related or owe their location or existence to the river ecosystem, are considered outstandingly remarkable if they are unique or exemplary compared to similar values of other rivers within a geographic region of comparison. The region used for comparison in this study is the Utah High Plateau's and the Southern Rocky Mountains Eco-region**.**

The following eligibility criteria were used and are intended to set minimum thresholds to establish ORVs and are illustrative but not all-inclusive. The "standard" criteria for each resource and the Outstandingly Remarkable Value Rating used is from BLM Manual 8351 and is used interagency wide to foster greater consistency within the federal river-administering agencies.

Discussion of River -Related Values

Scenic (S)

Criteria for Outstandingly Remarkable Value Rating

The landscape elements of landform, vegetation, water, color, and related factors result in notable or exemplary visual features and/or attractions. The BLM Visual Resource Inventory handbook, H-4810-1 may be used in addressing visual quality and in evaluating the extent of development upon scenic values. The rating must be a scenic quality "A" as defined in the BLM Visual Inventory Handbook. When analyzing scenic values, additional factors -- such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed -- may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

Evaluation of Present Situation

The study area included an analysis on 64 miles of streams and creeks within the planning area. Only one segment, East Fork of Parachute Creek from the falls and the canyon to the west was determined to contain Scenic ORV's. This segment is approximately 1-½ miles of East Fork of Parachute Creek, which starts at the falls and drops into the dramatic box canyon running to the west. The viewshed extends, in most cases beyond the canyon rim to take in the adjacent uplands viewed from the top of the falls.

This segments landform consists of steep canyon walls with vertical relief of over 2,000 feet from the top of the falls to the lowest reaches of the creek bottom. There is dramatic visual contrast due to the narrowness of the canyon itself and the changes in form, line and color. The diversity provides a stark contrast in the vegetation, as the steep barren cliffs fall off to spruce fir forests on the north facing slopes and to the sparsely vegetated south facing slopes.

The 200-foot waterfall is a dominant visual factor, both from above and as viewed from the canyon below. The swift flowing water cascading into a series of pool drops below creates a national park quality scenic attraction.

A variety of diverse, rich color combinations and contrasts are present in the soils, rocks, vegetation and water, which provide a harmony of contrast. The stark white cliffs with shades of tan and yellow, hues of green, yellow and brown in the vegetation all contribute to a very colorful landscape.

The river/creek does not dominate the landscape as it runs west, but still attracts attention as it travels westward through the rough and rocky canyon bottom. Some years the creek is intermittent at the lower reaches in the west end of the canyon. However for the purposes of eligibility the flow is sufficient to sustain or compliment this ORV.

Man made intrusions or cultural modifications in the canyon consist of one trail that is used as a stock driveway to move cattle up on top of the Plateau in the spring and in the fall. The trail follows along the creek and then traverses along the southern slope upward to the falls. This intrusion does not dominate the landscape and most portions of the trail are not visible. Other than these cultural modifications this segment is very primitive and pristine.

While this scenic segment of the study area is not one of a kind, it is unusually rare, and is notably distinctive. There are few other canyons of this scale with these similar features in the geographic region of comparison.

The current VRM objectives for the Roan Plateau planning area were established in the 1984 Glenwood Springs Resource Area Resource Management Plan (RMP) in accordance with the agency's Visual Resource Management guidelines. Visual characteristics assessed included landform, vegetation, water, color, adjacent scenery, scarcity and cultural modifications. The VRM designations were generally aimed at protecting the most scenic public lands, especially those that receive the greatest amount of public viewing. The top of the Roan Plateau (*known as the NOSR-091*) and Parachute Canyons(*095*) were determined to be high quality (Class A) scenic areas in the RMP. The analysis and findings done including the East Fork of Parachute Creek (Parachute Canyons-095) in the RMP are valid and very much current today.

Finding

The segment from East Fork of Parachute Creek Falls west into the box canyon contains outstandingly remarkable scenic values. This finding is due to the striking visual contrast and diversity in the narrow box canyon in line, form and color. The waterfall, which is one of the longest in the state, dominates the viewshed within the far eastern reach of the canyon. The distinctive harmony of all of these elements in a virtually undisturbed natural setting makes this segment outstandingly remarkable and unusually rare.

Recreational (R)

Criteria for Outstandingly Remarkable Values Rating

Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region of comparison or are unique or rare within the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing and boating. Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region of comparison. The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.

Evaluation of the Present Situation

Water-based recreational opportunities within the stream corridors include such activities as; fishing, wildlife observation, sightseeing. Big game hunting, camping and off-highway vehicle driving are the most popular activities in the area. No boating occurs due to the low flows and small size of the streams. Fishing is generally good in parts of Trapper, Northwater and East Fork of Parachute Creeks. Due to the small size of the creeks they could be easily over-harvested. The current numbers of visitors are not monitored or known.

The recreational setting looks generally natural even though numerous vehicle routes bisect the Roan Plateau. The creek bottoms and forested side hills offer the best opportunities to be removed from human activity. No developed facilities exist. Primitive dispersed campsites abound. The level of visitor management and regulation is low. Visitor services consist of informational signing at a few key locations, route signing and a visitor brochure/map. Two outfitters are permitted to offer big game hunting. Neither outfitter offers summer sightseeing or fishing trips.

The evidence of and the sights and sounds from other visitors/users remains low. The social setting, especially during the hunting season, has gotten more crowded over time but still remains less crowded than surrounding public lands. This is probably due to its geographic isolation and the existence of only two public access roads (JQS and Cow Creek).

No on-site visitor surveys have been conducted so little is known of the specific needs of visitors. Scoping for the Roan Plateau planning process indicated the current physical, social and administrative setting and activities offers opportunities to; experience solitude, enjoy natural aesthetics, experience the challenge of driving on rough back country roads, rest mentally and physically and maintain an outdoor oriented lifestyle. In addition to these social benefits scoping indicated that hunting and motorized sports provide positive economic contributions to the local economy.

Finding

The recreational opportunities are not unique within the region. Visitors have many regional opportunities, especially on the close-by White River National Forest, to visit small stream corridors for water-based recreational activities. Visitors are willing to travel long distance to hunt big game on the Roan Plateau but the few summer water-based recreational users tend to be local residents. Limited potential exists to attract visitors from outside the geographic region. The creek segments do not have the potential to provide national or regional commercial opportunities. The creek segments would not support competitive water-based recreational events. The stream segments do not have interpretive opportunities that are exceptional or have the potential to attract visitors from outside the area. In addition, the recreational settings within the creek corridors are not regionally unique.

As described in the narrative above, the directly river-related recreational opportunities are not unique, rare, or exemplary at a regional or national scale and are not considered to be outstandingly remarkable, individually or collectively.

Geology (G)

Criteria for Outstandingly Remarkable Value Rating

The river, or the area within the river corridor, contains one or more examples of a geologic feature, process or phenomenon that is unique or rare within the region of comparison. The feature(s) may be in an unusually active stage of development, represent a "textbook" example, and/or represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures).

Evaluation of Present Situation

Regionally, the Piceance Basin is upper Mesozoic to lower Cenozoic in age. The planning area is near the eastern edge of the Piceance Basin and near the prominent Grand Hogback monoclinal feature to the east. The surficial geology of the NOSR areas consists primarily of the Eocene Period Uinta and Green River Formations. These formations are approximately 40 to 50 million years of age. The Wasatch (Debeque) Formation outcrops primarily in the valley floor. The total thickness of the sedimentary rocks in the basin is in excess of 25,000'.

Evaluation of Present Situation

The Green River Formation intertongues on its lower and upper boundaries with the underlying Wasatch Formation and overlying Uinta formation. The Uinta formation of middle-to-late Eocene age is the surface formation on many of the ridgetops. Within the region, the Green River Formation is subdivided into the Anvil Points, Garden Gulch and Parachute Creek Members. The base of the Garden Gulch Member is generally considered the stratigraphic marker used for protection of overlying oil shale resources.

The Parachute Creek member of the Green River formation is about 900 to 1,200 feet thick in this area and is generally considered the primary oil shale unit of interest. The 2-6 foot thick Mahogany bed is a persistent bed of very rich oil shale within the Mahogany zone, which forms a sheer 80-100 foot thick cliff or ledge of rich oil shale within the upper part of the Parachute Creek Member. River and creek specific, Parachute and other creeks have cut through the overlying Uinta formation and have exposed the underlying Green River formation in some areas.

The Smithsonian Institution has conducted some paleontological studies within the Green River formation. Most of the paleontological resources collected from NOSRs consist of invertebrate fossils, although a number of scientifically significant vertebrates have been documented in the proximity. Fossils in the Green River formation have generally included fossil insects and plants, gar and other fish, turtles and crocodilians, similar to the Wasatch formation below the rim.

Finding
In summary, although often scenic, relative to the other Uinta and Green River exposures within the region, the exposures within the study area represent no unusually rare or unique geologic features, processes or other phenomenon but are fairly typical of other exposures found throughout the Picence Basin.

Fish (F)

Criteria for Outstandingly Remarkable Value Rating

Fish values may be judged on the relative merits of either fish populations, habitat, or a combination of these river-related condition

Populations: The River is nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of “outstandingly remarkable."

Habitat: The River provides exceptionally high quality habitat for fish species indigenous to the region of comparison. Of particular significance is habitat for wild stocks and/or federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable."

Evaluation of Present Situation

Colorado River Cutthroat Trout
Populations:
The Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*), is a native trout species of the Colorado River Basin. The Colorado River cutthroat trout (CRCT) is designated as a special status species by the states of Colorado, Utah, and Wyoming. In addition, the CRCT is classified as a Sensitive species by Regions 2 and 4 of the USFS and by the BLM in Colorado and Utah. This fish historically occurred in portions of the Colorado River drainage in the states of Wyoming, Colorado, Utah, Arizona, and New Mexico (Behnke 1992). In Colorado, this species was found in most of the larger rivers including the White, Yampa, Colorado, Gunnison, and San Juan. Today, remaining CRCT populations are primarily limited to small headwater streams and lakes within their historic range. Behnke (1979) stated that the CRCT occupied less than1% of its historical range. There is little doubt that the distribution and abundance of CRCT have declined (Young 1995, Martinez 1988, Binns 1977, Behnke and Zarn 1976).

The Roan Plateau planning area contains 5 conservation populations of CRCT. A conservation population is defined as a reproducing and recruiting population of native cutthroat trout that is managed to preserve the historical genome and/or unique genetic, ecological, and/or behavioral characteristics within specific population and within geographic units (CRCT Task Force 2001). In general, a conservation population is at least 90% genetically pure cutthroat trout (#10% introgression).

Known conservation populations on the Roan Plateau are located in JQS Gulch, East Fork Parachute, East Middle Fork Parachute, Northwater, and Trapper Creeks. In addition, First Anvil Creek, a tributary to East Fork Parachute Creek, may have an additional conservation population pending further investigation. The conservation populations located on top of the Roan Plateau are regionally important producers of this native, genetically pure sub-species of wild, naturally reproducing cutthroat trout.

In addition to meeting the genetic purity criteria, fish located within Trapper and Northwater Creeks are thought to have significant biological adaptations unique to the habitat in which these fish reside. These populations of cutthroat are known to persist in the summer when water temperatures in portions of the stream approach and exceed 80 degrees Fahrenheit (CDOW 2002).

Habitat:
The streams located on the Roan Plateau are unique because the headwaters of all of these creeks are located on BLM lands. East Fork Parachute and East Middle Fork Parachute Creek both plunge 200 feet off the Roan Cliffs which provides a unique and scenic protective barrier from nonnative fishes found below.

The streams on the Roan Plateau provide diverse habitat for native cutthroat trout and introduced brook trout in East Fork Parachute Creek. The upper reaches of most streams have limited riparian vegetation and instream habitat complexity is limited by lack of pools. However, middle reaches contain good stands of overhanging grasses, sedges, and rushes, along with some cottonwoods and willows, which provide excellent cover. Lower reaches have good stands of willows and conifers and have a better mix of pools, runs, and riffles. All streams are very productive with an abundance of diverse aquatic invertebrates, and water quality is good. In general, weeds are a problem within many of the riparian areas located adjacent to these streams. Houndstongue and Canada thistle are common.

Findings:
Populations: JQS Gulch, East Fork Parachute, East Middle Fork Parachute, Northwater, and Trapper Creeks are all regionally and nationally important as producers of native, genetically pure, and naturally reproducing Colorado River cutthroat trout. These populations are all designated conservation populations and are important in the overall conservation of the species (CRCT Task Force 2001). Of particular significance is that this sub-species of cutthroat is a Sensitive Species and has been petitioned for Federal listing under the Endangered Species Act. In addition, these fish show unique adaptations in their ability to tolerate extreme summer water temperatures that exceed 80 degrees Fahrenheit. The Roan Plateau Colorado River cutthroat trout populations are nationally/regionally significant when contrasted with other populations within the geographic region of comparison.

Habitat: JQS Gulch, East Fork Parachute, East Middle Fork Parachute, Northwater, and Trapper Creeks all provide an adequate diversity of quality habitats necessary to support and sustain this fish species. However, for the most part, these habitats are not in optimal condition and are not considered outstandingly remarkable or nationally/regionally significant when contrasted with other areas within the geographic region of comparison. Riparian vegetative structure, water quality, and instream habitat features are similar to other streams within the geographic region of comparison. One unique feature is the fact that these streams contain wild strains of genetically pure, reproducing Colorado River cutthroat trout. In addition, East Fork Parachute Creek falls is a unique scenic feature located on BLM lands that provides an effective habitat barrier from nonnative fishes found below. Otherwise, the habitats in which these fish reside are not “outstanding or remarkable” in and of themselves.

WILDLIFE (W)

Criteria for Outstandingly Remarkable Values Rating

Wildlife values may be judged on the relative merits of either terrestrial or aquatic wildlife populations or habitat or a combination of these conditions.

Populations: The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique, and/or populations of federal or state listed (or candidate) threatened, endangered or sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable."

Habitat: The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, and/or may provide unique habitat or a critical link in habitat conditions for federal or state listed (or candidate) threatened, endangered or sensitive species. Contiguous habitat conditions are such that the biological needs of the species are met. The diversity of habitats is an important consideration and could, in itself, lead to a determination of "outstandingly remarkable”.

Evaluation of the Present Situation

Numerous species of birds, mammals, and aquatic life have been documented on the Roan Plateau. A total of 33 species of mammals, 125 species of birds, 12 species of reptiles and amphibians are known to occur in this geographical area (Broderick and Coleman,1996). The status of most of these species is unknown.

Birds: Meredith, Pague, Rondeau, Spackman, and Wunder (1997) reported the Roan Plateau yielded locations for 10 birds (Table 1) with significant natural heritage ranks (global and state) and updated previously known locations for two birds (Golden Eagle (Aquila chrysaetos) and the federally endangered American peregrine falcon (Falco peregrinus anatum). American peregrine falcons nest along the cliffs near Anvil Points and utilize the Roan Plateau for hunting habitat. Several other raptor species, including the Northern goshawk and Cooper’s hawks, have been observed on the Roan Plateau. Sharp-tailed grouse were present on the Roan Plateau in the mid to late-1970's, but have not been documented in recent years.

Mammals: Lands within the corridor are used by common Colorado mammals including; mule deer, elk, black bear, mountain lion, coyote, fox, bobcat and many small mammals. Meredith, Pague, Rondeau, Spackman, and Wunder (1997) found a Preble's shrew (*Sorex c.f. preblei*) in the oakbrush on the slopes of the box canyon below the East Fork of Parachute Creek falls. It was known from only two other locations in Colorado, prior to its discovery on the Roan Plateau. Little is known of the Preble's shrew anywhere in its range. There is not enough known information to estimate the distribution of the species in Colorado
Insects: Two insects, Baird's swallowtail (*Papilio bairdii*) and Green-winged hairstreak (*Callophrys affinis*), watchlisted by the Colorado Natural Heritage Program, were found on the Roan Plateau by Meredith, Pague, Rondeau, Spackman, and Wunder (1997). The global status of both insects appears secure but the insects are watchlisted to determine whether or not to actively track the species/subspecies.

Habitat: Meredith, Pague, Rondeau, Spackman, and Wunder (1997) recognized eleven major vegetation types on the Roan Plateau (aspen woodlands, spruce fir/Douglas fir forests, pinyon-juniper woodlands, mixed mountain shrublands, mountain sagebrush, mountain grasslands, moist meadows, Indian ricegrass shale barrens, sparsely vegetated slopes, riparian, and hanging garden seeps.

The diversity of habitat types on the Roan Plateau and their proximity to each other are important for big game. Especially meaningful are the mesic aspen communities and the riparian habitats which are utilized for birthing and nursery areas for elk and mule deer (Broderick, Coleman, 1996).

The aspen habitat within the stream corridors also provides a security component for many other wildlife species. The stream corridors offer good solitude for wildlife because of the varied and extreme topographical relief from drainage bottom to ridge top, juxtaposed with less road development in the aspen and Douglas fir habitats. The aspen habitats in the area from First Water to Third Water Creeks, that extend north into the Strawberry and Yellow Jacket drainages, are examples (Broderick, Coleman, 1996). The stream corridors also provide also offer habitats that are used as transition range between summer and winter range by mule deer and elk. It is also prime summer habitat for bear and mountain lion. These habitats are also important to many other birds and small mammals.

Finding

A diversity of wildlife can be found within the stream corridors. However, the species present and number of species are not considered outstandingly remarkable or nationally/regionally significant when contrasted with other areas within the geographic region of comparison. The diversity of wildlife is the result of the commingling of habitats not the result of particularly unique features that cannot be found elsewhere within the region. No wildlife populations considered to be unique or populations of State, federally listed, or candidate threatened or endangered species are known to be acutely tied to studied stream corridors.

The stream corridors do provide connectively in an overall landscape that is fragmented by motorized routes and other human imprints. The multi-layered riparian vegetation is particularly important in providing for nesting, hiding and feeding for a wide variety of species. The overall wildlife habitat diversity and value to wildlife is similar to that found throughout the region.

Since the noted bird species are highly mobile, any effort to conserve these species should try to conserve the extent of the habitat used by species rather than point locations of documented occurrences. Preservation of these stream sections would help conserve the extent of habitat for these bird species but none are individually crucial wildlife habitats, regional or nationally.

Cultural /Prehistory (C)

Criteria for Outstandingly Remarkable Value Rating

The river, or area within the river corridor, contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have unique or rare characteristics or exceptional human interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; and/or may have been used by cultural groups for rare sacred purposes. Many such sites are listed on the National Register of Historic Places, which is administered by the NPS.

Prehistoric Cultural

Criteria for Outstandingly Remarkable Value Rating

The Roan Plateau encompassing the river corridors contains evidence of occupation or use by Native Americans. However, sites must have unique or rare characteristics or exceptional human-interest value(s) to be considered outstanding. Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; and/or may have been used by cultural groups for rare sacred purposes. Many such sites are listed on the National Register of Historic Places.

Evaluation of the Present Situation

The GSFO database indicates that 147 cultural resource inventories have intensively surveyed approximately 30% of the Roan Plateau, recording 369 cultural resources. Prehistoric resources comprise 77% of all cultural resources and consist of camps, wickiups, processing areas, and isolated finds. During initial consultation, the Ute Tribes indicated that the Plateau is part of their ancestral homeland, thereby increasing the potential of traditional cultural properties and sacred sites such as tree scaffolds for hunting and/or burials, eagle traps, vision quest sites, rock art panels, and trails. However, none are currently known. All known and discovered sites are protected under existing statues, regulations, and policy.

Finding

These properties indicate the nearly continual use of the Plateau for about 10,000 years including: Paleoindian, Archaic, and Ute cultures. It is likely that the types of sites described above will continue to be found, many of which will be considered significant properties eligible for listing on the National Register of Historic Places and the understanding of prehistoric life-ways.

However, known sites do not seem to have unusual characteristics or exceptional human interest values within the study area. Therefore, the prehistoric resource values are determined not to be outstandingly remarkable.

Historic Cultural

Criteria for Outstandingly Remarkable Value Rating
The Roan Plateau encompassing the river corridors contains evidence of occupation or use by Euro-Americans during the historic period. However, sites within the river corridor study must contain a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare or one-of-a-kind in the region, 50 years old or older. Many such sites are listed on the National Register of Historic Places.

Evaluation of the Present Situation

The GSFO data base indicates that 147 cultural resource inventories have intensively surveyed approximately 30% of the Roan Plateau, recording 369 cultural resources. Historic properties comprise 23% of the cultural resources and include: trails and roads, oil shale extraction and production facilities, irrigation features, mines, corrals, line camps, cabins, trash scatters, aspen art, and isolated finds. All known and discovered sites are protected under existing statues, regulations, and policy.

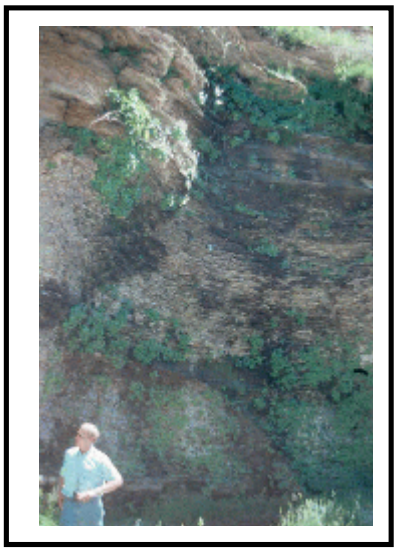
Finding

These properties indicate the historic use of the Roan Plateau from the late 1800's until the present. It is likely that the types of sites described above will continue to be found, many of which will be considered significant properties eligible for listing on the National Register of Historic Places.

However, known sites do not seem to have unusual characteristics or exceptional human interest values within the study area. Therefore, the historic resource values are determined not to be outstandingly remarkable.

Botanical/Ecological Values (B)

Criteria for Outstandingly Remarkable Values Rating
The river, or river corridor, contains nationally or regionally important populations of indigenous plant species. Of particular significance are species considered to be unique or populations of federally listed or candidate threatened and endangered species. Additional factors such as diversity of species, numbers of plant communities, and cultural (existing and Native American) importance of plants may be considered.



Evaluation of the Present Situation
The East Fork of Parachute Creek, East Middle Fork Parachute Creek and Northwater Creek are found on the Roan Plateau which is part of the Utah High Plateaus Ecoregion (TNC, 2002). Cool, mesic mid-elevation plateaus and deep canyons characterize the ecoregion. The Roan Plateau lies on the eastern edge of the ecoregion and is unique in that it is higher in elevation and more mesic than the rest of the ecoregion. The Roan Plateau sits atop the Green River shale formation, and the study river corridors form deep rugged canyons as they cut through the resistant Green River shale. Upland vegetation consists of a combination of mixed mountain shrubs, mountain big sagebrush, aspen groves, spruce-fir forests, grasslands, and sparsely vegetated shale barrens. Riparian communities include moist meadow/graminoid wetlands, riparian shrublands and riparian woodlands. Riparian vegetation generally consists of tufted hairgrass, various sedges, Rocky Mountain willow, Drummond's willow, blue spruce, and Engelmann spruce. A unique wetland feature found in these three drainages is the hanging garden seeps which support the rare hanging garden sullivantia. Several indigenous plant communities that are globally or regionally imperiled are found in East Fork Parachute Creek.

Hanging garden seeps are limited to the walls of waterfalls or cliffs with seeps. These seeps are most abundant on north-facing slopes along East Fork Parachute and Northwater Creeks where the Green River shale beds are exposed within the canyon walls. The hydrologic flows combined with the Green River shale substrate create a unique "hanging garden" environment, which supports the Hanging garden sullivantia. In some cases, Mancos columbine and Eastwood's monkeyflower are also present in these hanging garden environments. The Hanging garden sullivantia (Sullivantia hapemanii), a Colorado endemic plant, is narrowly restricted to calcareous seeps, but is found in abundance at these hanging gardens. Although the hanging garden sullivantia occurs in several locations other than the Roan Plateau, the Roan Plateau occurrences are more numerous and more extensive than anywhere else (CNHP, 1997).

East Fork Parachute Creek is a small but biologically significant tributary to the Colorado River. The headwaters for this creek begin at approximately 9000 feet in elevation with gently rolling hills of aspen forests, sagebrush and snowberry shrublands, and grasslands. East Fork Parachute Creek originates near the eastern rim of the Roan Plateau and flows westward, cutting through the Green River shale formation to form a deep canyon before plunging 200 feet into a narrow scenic box canyon.

Numerous creeks drain into East Fork Parachute Creek. All of these side tributaries begin with small springs and seeps, which flow more or less year round. Each tributary except for Golden Castle and First and Second Anvil Creek has a dramatic cliff/waterfall near its confluence with East Fork providing picturesque hanging garden habitat. The spectacular hanging gardens of Golden Castle and Anvil Creeks are distributed along their respective tributaries.

The riparian plant communities of East Fork Parachute Creek are the most diverse of any on the Roan Plateau. The creek may be divided into four broad zones based on different stream characteristics and vegetative communities. The upper zone encompasses the headwaters of the stream and has a shallow gradient with minimal flows. The vegetation consists primarily of herbaceous riparian species such as tufted hairgrass and various sedges. Below this section, is an area of numerous beaver dams with a shallow stream gradient and a broadened floodplain. Rocky Mountain and Drummond's willows dominate vegetation in this section. Approximately a mile above the 200-foot waterfall, the canyon narrows and the riparian vegetation is forested with spruce-fir and narrowleaf cottonwoods. The plant communities of Colorado blue spruce/red osier dogwood and narrowleaf cottonwood/red osier dogwood are found in only a handful of riparian areas in Colorado. These communities along East Fork Parachute Creek are in good condition. Just beyond this section, the stream cascades over a cliff forming a 200-foot high waterfall. The box canyon below the falls is deep and spectacular. The riparian vegetation changes drastically to a more low-elevation type of boxelder, narrowleaf cottonwood, and red osier dogwood community. This community is considered rare on a global and statewide scale. East Fork Parachute contains an excellent example of this rare community type.

Due to the westerly orientation of the creek, the north and south-facing slopes are dramatically different. The south-facing slopes are sparsely vegetated on the steep sections right above the creek and more densely vegetated on the more gentle slopes above, dominated by mountain sagebrush and snowberry. The north-facing slopes are characterized by spruce-fir forests on the steep mesic slopes adjacent to the stream and aspen forests above them on the more gentle terrain (CNHP, 1997).

Northwater Creek and East Middle Fork Parachute Creek flow parallel to East Fork Parachute Creek. Northwater Creek is a smaller tributary, which joins with Trapper Creek to form East Middle Fork Parachute Creek. The surrounding landscape in these drainages is very similar to East Fork Parachute Creek. The riparian vegetation is not as diverse as that in the East Fork; however, East Middle Fork Parachute Creek and the lower segment of Northwater Creek also support hanging gardens.

Finding

A diversity of vegetative communities can be found within these stream corridors. East Fork Parachute Creek contains several indigenous plant communities, which are considered rare or imperiled within Colorado and rare to relatively common nationally. In addition, East Fork Parachute Creek, East Middle Fork and lower Northwater Creeks all contain hanging garden environments, which support the narrowly endemic Hanging garden sullivantia. The occurrences in these drainages are outstandingly remarkable or nationally/regionally significant when contrasted with other areas within the ecoregion.

Hydrologic/Water Quality (H)

Criteria for Outstandingly Remarkable Values Rating

The river has exceptionally pure, clean, and/or clear water. The river is known for its water quality regionally or nationally. It provides, or has the potential to provide, exceptionally high water quality for a variety of beneficial uses including but not limited to, fish and wildlife, recreation, and communities. The river or the area within the river corridor contains an example(s) of a hydrologic feature, process, or phenomena that is rare, unusual, one-of-a-kind, or unique to the geographic region. The features may be an unusually active stage of development, represent a text book example and or represent a unique or unusual combination of hydrologic phenomena (large aquifers, springs, or other features).

Evaluation of the Present Situation

The East Middle Fork of Parachute Creek and East Fork of Parachute Creek watersheds are characterized by a high elevation rolling mountainous plateau in the headwater area. After flowing generally less then 0.5 mile, these streams cut through the underlying Green River Shale Formation forming narrow steeply incised canyons. They generally flow directly over bedrock or flow over a shallow layer of alluvium. Both streams flow in a westerly direction to approximately the western boundary of public land where they plunge over waterfalls of several hundred feet. They then flow approximately 4 miles further west before emptying into the main stem of Parachute Creek. These streams are free flowing with virtually no diversion of water or water management facilities located on the public lands on the plateau.

The East Middle Fork of Parachute Creek drains an area of approximately 22.1 square miles while the East Fork of Parachute Creek watershed is an approximately 20.4 square miles area northwest of the town of Rifle, Colorado. Trapper Creek and Northwater Creek are tributary to the East Middle Fork of Parachute Creek while JQS Creek and First Anvil Creek are tributary to the East Fork of Parachute Creek. Numerous other small streams and springs that are tributaries these watersheds.

The longest perennial channel in the East Middle Fork of Parachute Creek drainage flows for 8 miles, beginning at 8,600 feet dropping to 7,660 feet in elevation. The lower portion of the drainage under evaluation for outstandingly remarkable values includes portions of Trapper Creek, Northwater Creek, and the East Middle Fork of Parachute Creek. There are 11.5 miles of stream being evaluated in this basin. The East Fork of Parachute Creek flows for 10 miles and drops from 9,000 feet to 6,640 feet in elevation. The portion of the drainage under evaluation for outstandingly remarkable values includes portions of JQS Creek, First Anvil Creek and the East Fork of Parachute Creek. A total of 12.5 miles of stream channel are being evaluated in the East Fork of Parachute Creek basin.

The USGS operated gaging station #09092850 on the East Middle Fork Parachute Creek from October 1976 through September 1983. It was located at the western boundary of public land. The average discharge was 6.2 cubic feet per second (cfs) or 4,490 acre feet per year for the period of record. Extreme discharges ranged from a maximum of 186 cfs on May 17, 1979, to a minimum of 0.09 cfs on December 24, 1981.

Two gaging stations were operated by USGS on the East Fork Parachute Creek from October 1976 through September 1983. One, East Fork Parachute Creek near Rulison, Colorado (#09092970) was located approximately 0.3 miles below the falls. It had an average discharge of 7.75 cubic feet per second (cfs) or 5,610 acre-feet per year. Extreme discharges for the period are a maximum discharge of 174 cfs on May 11, 1980 and a minimum discharge of no flow on many days. The other, East Fork Parachute Creek near Anvil Points, Colorado (#09092960) was located just downstream from first Anvil Creek. It had an average discharge of 8.09 cfs or 5,860 acre-feet per year. Extreme discharges for the period ranged from a maximum of 364 cfs on May 30, 1983 to a minimum discharge 0.07 cfs on August 9-11, 1977.

Generally, surface runoff is generated primarily from winter snow pack. However, numerous springs and short duration high intensity summer thunderstorms supplement stream flow. Snow pack varies from year

to year influencing the amount and duration of spring runoff. These streams have seasonal variation of flow, with the highest runoff typically occurring from April through May. Once snowmelt generated runoff has occurred, flow subsides over the summer months. The numerous springs in both basins provide a reliable water supply during the fall and winter base flow period.

Instream Flows and Water Rights

The Colorado Water Conservation Board has acquired instream flow water right adjudications on the stream reaches considered for outstandingly remarkable values. These instream flow rights are based on recommendations for the minimum flows necessary to support cold water fishery values. There are also more than 125 adjudicated water rights for springs located within these watersheds. However, most of those springs are located more than 1/4 mile from the stream reaches under consideration. Most of the water rights in the upper part of the basins are held by BLM. There are two reservoirs with storage water rights of 3.5 and 5.3 acre-feet in the upper basin of First Anvil Creek. These are privately controlled. There is also a privately held 130 acre-feet conditional storage water right on the mainstem of the East Middle Fork of Parachute Creek. It is on private land just west of the public land boundary. There are no known water diversions or other water management facilities located on reaches of streams considered for outstandingly remarkable values.

Water Quality

Water quality data are available for the stream reaches under consideration. At the USGS gaging station on the East Middle Fork Parachute Creek (#09092850) temperatures varied from 0 to19 degrees centigrade, pH from 7.9 to 8.8, total dissolved solids from 222 to 362 milligrams per liter (mg/l), and sediment from 10 to 650 mg/l. Data collected at the gaging station on the East Fork Parachute Creek (#09092960) showed temperatures varied from 0 to 20 degrees centigrade, pH from 7.1 to 8.8, total dissolved solids from 225 to 355 mg/l, and no sediment data were collected. The gaging station on the East Fork Parachute Creek (#09092970) just below the falls, had temperatures ranging from 0 to16.5 degrees centigrade, pH from 7.6 to 8.8, total dissolved solids from155 to 353 mg/l, and sediment from 0 to 7,180 mg/l. Except for periods of high flow the streams are of very good quality.

Findings

The stream reaches under consideration do not possess outstandingly remarkable features for flow, nor do they exhibit rare, unusual or unique hydrologic characteristics. The hydrologic features of these streams are commonly found in the region. Many stream of similar size flow through topographic breaks forming steep walled canyons with relatively little human impacts.

Water in these streams are normally clean and clear when not influenced by severe hydrologic events. During these events water turbidity is elevated by increased erosion and sediment loading which temporarily lowers water quality. Dilution during high flows improves other constituents. Overall, the rivers water quality contributes substantially to the functioning of the river system by supporting good habitat for cold water fish species and other aquatic life. The streams water quality is a significant attribute to supporting wildlife populations and habitat, and is sufficient to enhance scenic values and recreational opportunities such as fishing, botanical and wildlife viewing, big game hunting , and photography within the streams corridors.

Outstandingly Remarkable Values Summary

The BLM interdisciplinary study team has determined that the following river-related resources are outstandingly remarkable values and within the area of study: Scenery, Fish, and Botany. Outstandingly remarkable fish values exist within Trapper Creek, Northwater Creek, East Fork of Parachute Creek, East Middle Fork Parachute Creek, and in First Anvil Creek. A high concentration of outstandingly remarkable rare plant and riparian communities exist within East Fork of Parachute Creek, First Anvil Creek, Second Anvil, JQS Gulch, Golden Castle Gulch, East Middle Fork and lower Northwater Creeks Additionally, outstandingly remarkable scenic values exist on East Fork of Parachute Creek at the Falls and extending into the canyon to the west.

Preliminary findings show **(See Map # 3)** eight streams totaling 24.7 miles (7,833 acres) were found to met the free flowing criteria, have Outstanding Remarkable Values (ORV's), and therefore meet the eligibility criteria. The following table shows the findings for all the streams within the planning area, which includes: free flowing criteria, outstanding remarkable values, eligible determinations on streams, and miles of eligible segments.

Eligibility Determination Summary

RIVER/STREAM NAME	FREE FLOWING CRITERIA-	OUTSTANDING REMARKABLE VALUES	ELIGIBLE	ELIGIBLE MILES
Government Creek	NO		NO	0
Trapper Creek	YES	F	YES	6.1
Northwater Creek	YES	F,B	YES	3.2
1. Northwater Branch	YES		NO	0
2. Northwater Branch	YES		NO	0
3. Northwater Branch	YES		NO	0
4. Northwater Branch	YES		NO	0
Tichner Creek	YES		NO	0
Yellow Jacket	YES		NO	0
Raspberry Creek	YES		NO	0
Ben Good Creek	YES		NO	0
East Fork of Parachute Creek	YES	F, B, S	YES	7.5
JQS Gulch	YES	F,B	YES	1.1
JQS Branch	YES		NO	0
Golden Castle Creek	YES	F,B	YES	1
First Anvil Creek	YES	F,B	YES	2.2
First Anvil Branch	NO		NO	0
Second Anvil Creek	YES	B	YES	1.8
East Middle Fork Parachute Creek	YES	F,B	YES	1.1
Second Water Creek	YES		NO	0
Third Water Creek	YES		NO	0
Timber Gulch	YES		NO	0
JV Gulch	YES		NO	0
Sheep Trail Hollow Creek	NO		NO	0
Bull Gulch	YES		NO	0
Forked Gulch	NO		NO	0
West Forked Creek	YES		NO	0
Cottonwood Creek	YES		NO	0
Goodrich Creek	YES		NO	0
Thirty two mile Creek	NO		NO	0

III. Stream Classification Evaluation

Potential Classifications

The Act and Interagency Guidelines provide the following direction for establishing **preliminary** classifications for eligible rivers. All eligible river segments must be tentatively classified and management measures instituted as necessary to ensure appropriate protection of the values supporting the eligibility and classification determinations. Actual classification is a Congressional legislative determination and is only interim until Congressional action.

Classification Categories

Section 2 (b) of the WSRA specifies three classification categories for eligible rivers. Classification is based on the type and degree of human developments associated with the river adjacent lands as they exist at the time of the evaluation.

Wild rivers (W): Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic rivers (S): Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads. Scenic does not necessarily mean the river corridor has to have scenery as an outstandingly remarkable value; however, it means the river segment may contain more development than a wild segment and less development than a recreational segment.

Recreational rivers (R): Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. Parallel roads or railroads, existence of small dams or diversions can be allowed in this classification. A recreational river area classification does not imply that the river will be managed or prioritized for recreational use or development.

Preliminary Classifications

Classification establishes a guideline for management until either a suitability determination or designation decision is reached. It is a determination based on existing characteristics of a river area resulting from ***human-caused*** change or levels of development. Classification does not affect land use decisions related to private property.

For the purpose of this evaluation, the study area will be divided by streams and then each stream into segments to reflect the presence of waterway modification and the types of developments found along the creek. The segments **(See Map # 4)** descriptions and the preliminary classifications are summarized below:

1. East Fork of Parachute Creek

a. Segment 1. (5.3 miles): From BLM public lands boundary on the west upstream to Second Anvil Creek. This segment has been tentatively classified as **wild.**

This segment includes East Fork of Parachute Canyon, the waterfall and the steam corridor running east to Second Anvil Creek. This section is free of impoundment. One stock driveway/trail exists in the western reaches of the study corridor and traverses up slope to the falls. This trail is maintained to allow for passage for cattle and horses and receives maintenance when rock slides close passage. There is a barbed wire fence line crossing the creek directly east of the falls that serves as a pasture fence. The fence line and the stock driveway are inconspicuous and do not dominate the viewshed. The use of temporary

snow fence is sometimes used in addition to the pasture fence to drive the cattle up a steep trail heading north out of the drainage known as the “ladder”. The shoreline is largely undeveloped there are no other developments or structures and the corridor is essentially primitive. This segment stops at the junction of Second Anvil Creek where an old road from Third Water Gulch ends and old fence line crosses the drainage and continues to run parallel to the upper reaches of the creek.

b. Segment 2. (2.1miles): East Fork of Parachute Creek from Second Anvil Creek to the upper reaches including JQS Gulch. This segment has been tentatively classified as **scenic.**

This segment starts in the west at the confluence of Second Anvil Creek and includes the remaining stream corridor running eastward into the upper reaches. This section is free of impoundments. A series of natural beaver dams have occurred and breached over the years throughout this segment. A fence line runs parallel on the north side of the Creek within the 1/4 boundary on a rim above the creek. A maintained access road comes down to the creek bottom at Third Water Gulch. This route is used mainly for recreational use, including fishing, camping, and hunting. This reach is largely undeveloped and primitive in nature. This segment is best described as scenic.

First Anvil Creek

a. Segments 1. (.60 miles): From the confluence of East Fork of Parachute Creek upstream to fence line on the south side of the creek. This segment has been tentatively classified as **wild.**

This segment starts at the confluence of East Fork of Parachute Creek and is a natural continuation of that riparian corridor. This section is free of impoundments. The shoreline is undeveloped and the corridor is essentially primitive. This segment has little or no evidence of grazing and is generally inaccessible except by trail or cross-country. There are no improvements or evidence of man. This segment is best described as wild.

b. Segment 2. (1.6 miles): From eastern upper reaches running downstream to the where the fence line on the south side of the creek ends. This segment has been tentatively classified as **scenic.**

This segment is free of impoundments. The shoreline is undeveloped and the corridor is mostly primitive. A fence line parallels the south side of the creek and there is evidence of a two-track road for approximately 1 mile running adjacent to the fence. The primitive two-track road does offer access for most portions of this creek. There are no structures or other developments within this section. This segment is best described as scenic.

Second Anvil Creek

a. Segments 1. (1.4. miles) From the confluence of East Fork of Parachute Creek up to where BLM RD # 8015 comes into the boundary from the north.. This segment has been tentatively classified as **wild.**

This section is essentially an natural extension of East Fork of Parachute Creek and is essentially primitive in and has little or no evidence of human activity. It is free of impoundments and has no structures or developments. The area is inaccessible except by cross country use or the use of game and/or livestock trails. There is an abandoned fence line that is above the creek on the north side. There is some evidence of grazing within the corridor. This segment is best described as wild.

b. Segment 3. (.31 miles) From the upper headwaters of Second Anvil downstream to where BLM RD # 8015 comes into the boundary from the north. This segment has been tentatively classified as **recreational.**

This segment is free of impoundments. The shorelines have some development. There are multiple developments and evidence of man in the upper reaches of the creek. Two livestock developments, and a old homestead cabin, and several roads encroach into the upper reaches of the area. There is evidence of grazing within the corridor. This segment is accessible from three roads and multiple game and livestock trails starting at the headwaters. This segment is best described as recreational.

Golden Castle Gulch

This includes all of Golden Castle Gulch from the upper reaches to the confluence of East Fork of Parachute Creek. The whole Creek has been tentatively classified as **wild.**

Golden Castle Gulch all the way to the confluence of East Fork of Parachute Creek is free of impoundments. Several beaver dams occur in this reach. A trail exists on a bench above the creek to the north. This trail serves as the only access to the lower reaches and is largely in place from livestock and wildlife. The shorelines are undeveloped. There is limited evidence of grazing in this drainage. The whole corridor is essentially primitive and there is little evidence of human activity. This segment is best described as wild.

JQS Gulch

(1.1 miles) This is from the eastern most portions of JQS Gulch, starting at the western end of the exclosure fences/corrals running westward downstream until it reaches the confluence and headwaters of East Fork of Parachute Creek. This segment has been tentatively classified as **scenic.**

JQS Gulch is free of impoundments. The shorelines are undeveloped and mostly primitive in nature. The portion of the Creek where a fence line to the north is evident. However, there are no dwellings or other structures within the corridor. There is limited evidence of grazing in this drainage. The Creek is accessible intermittently by game and livestock trails. This segment is best described as scenic.

Trapper Creek

a. Segments 1. (.78 miles) From the confluence of Northwater Creek and East Middle Fork Parachute Creek to the west, running eastward upstream to the fence line on the south side of the creek in section 12. This segment has been tentatively classified as **wild.**

This segment is free of impoundments and has little evidence of human activity. This segment is accessible by the road approximately 1/12 mile upstream from the confluence of Northwater Creek. The remaining portions of the creek are accessed intermittently by game and livestock trails. There are no roads or other vehicular travel routes within the corridor. This segment is largely primitive and undeveloped and best described as wild.

b. Segment 2. (3.4 miles) Starting in the west at the western end of a pasture fence in the SE 1/4 of Section 12 running east to the NE 1/4 of Section 4, where a bank stabilization project is located and BLM RD. # 8003 comes down to the creek. This segment has been tentatively classified as **recreational.**

This segment has some existing impoundments. These developments were done to enhance the riparian to improve fish habitat. The developments while meeting the free-flowing criteria, consist of drop structures, 2 fence exclosures, and bank stabilization. Additional fencing is present along most of this segment and criss-crosses the creek in several places. There is also a road that comes down to the creek from the north directly adjacent to the exclosure fences. Development at the bottom is primitive and limited to a bulletin board and a turn around space for vehicle. An additional road comes down to the creek at the eastern portion of this segment and ends at bank stabilization improvement project. Both these roads serve as recreational access points. There is evidence of livestock grazing and roads and trails are more visible in the uplands from this section thereby showing evidence of human activity. This segment is readily accessible by three roads. This segment is best described as recreational.

c. Segment 3. (1.8 miles) From the upper reaches of Trapper Creek in the east to where a bank stabilization project is located and BLM RD. # 8003 comes down to the creek**.**

This segment is free of impoundments. However there are a series of beaver dams in the upper reaches of Trapper Creek. The shorelines are largely undeveloped and primitive. There is limited amount of livestock developments within this segment. There is approximately 1 mile of fence line running north of the creek. The creek is accessible intermittently by game and livestock trails. There is one undeveloped two-track road coming in from the west that ends up within the boundary along the upper reaches of the creek. This segment is best described as scenic.

Northwater Creek

The eligible portion **(3.2 miles)** of Northwater Creek starts at the confluence of Trapper Creek in the west and runs eastward until it enters onto private property. This segment has been tentatively classified as **wild.**

Northwater Creek is free of impoundments from the confluence of Trapper Creek to where the creek enters onto private property. One fence line comes down into the area but does not reach the creek bottom from the south in section 13. No other man made developments or evidence of human activity is present. There is evidence of livestock grazing and noxious weeds within the study boundaries, however they do not dominate the landscape. The stream corridor is inaccessible except by trail. There is one historic cabin that serves as a cow camp within the upper reaches of the 1/4 mile boundary. However, the cabin is located on a bench above the creek and is inconspicuous from within the corridor. There are no additional developments or structures within the corridor. The shoreline is essentially primitive and there is little evidence of human activity. This segment is best described as wild.

East Middle Fork Parachute Creek

The eligible portion **(1.1 miles)** of East Middle Fork starts in the west at the public private boundary and runs eastward to the headwaters at the confluence of Trapper and Northwater Creeks. This segment has been tentatively classified as **wild.**

This portion of East Middle Fork is free of impoundments. The shoreline is primitive and no developments exist within this segment. There is little or no evidence of livestock grazing within the corridor. This segment is generally inaccessible except by trail. This segment is best described as Wild.

IV. Protective Management

When a river segment is determined to be eligible and given an preliminary classification, its identified outstandingly remarkable values shall be afforded adequate protection, subject to valid existing rights, and until the eligibility determination is superseded, management activities and authorized uses shall not be allowed to adversely affect either eligibility or the tentative classification from a wild area to a scenic area or a scenic area to a recreational river area.

**Public notification of the protective management shall occur no later than publication and release of the Draft RMP or plan amendment. However, protective management shall be initiated by the authorized officer (Area Manager) as soon as eligibility is determined. Specific management prescriptions for eligible river segments should provide protection in the following ways:

1. Free-flowing values: The free-flowing characteristics of the eligible river segments cannot be modified to allow stream impoundments, diversions, channelization, an/or rip-rapping to the extent the BLM is authorized under law.

2. River Related Values: Each segment shall be managed to protect identified outstandingly remarkable values and, to the extent practicable such values shall be enhanced.

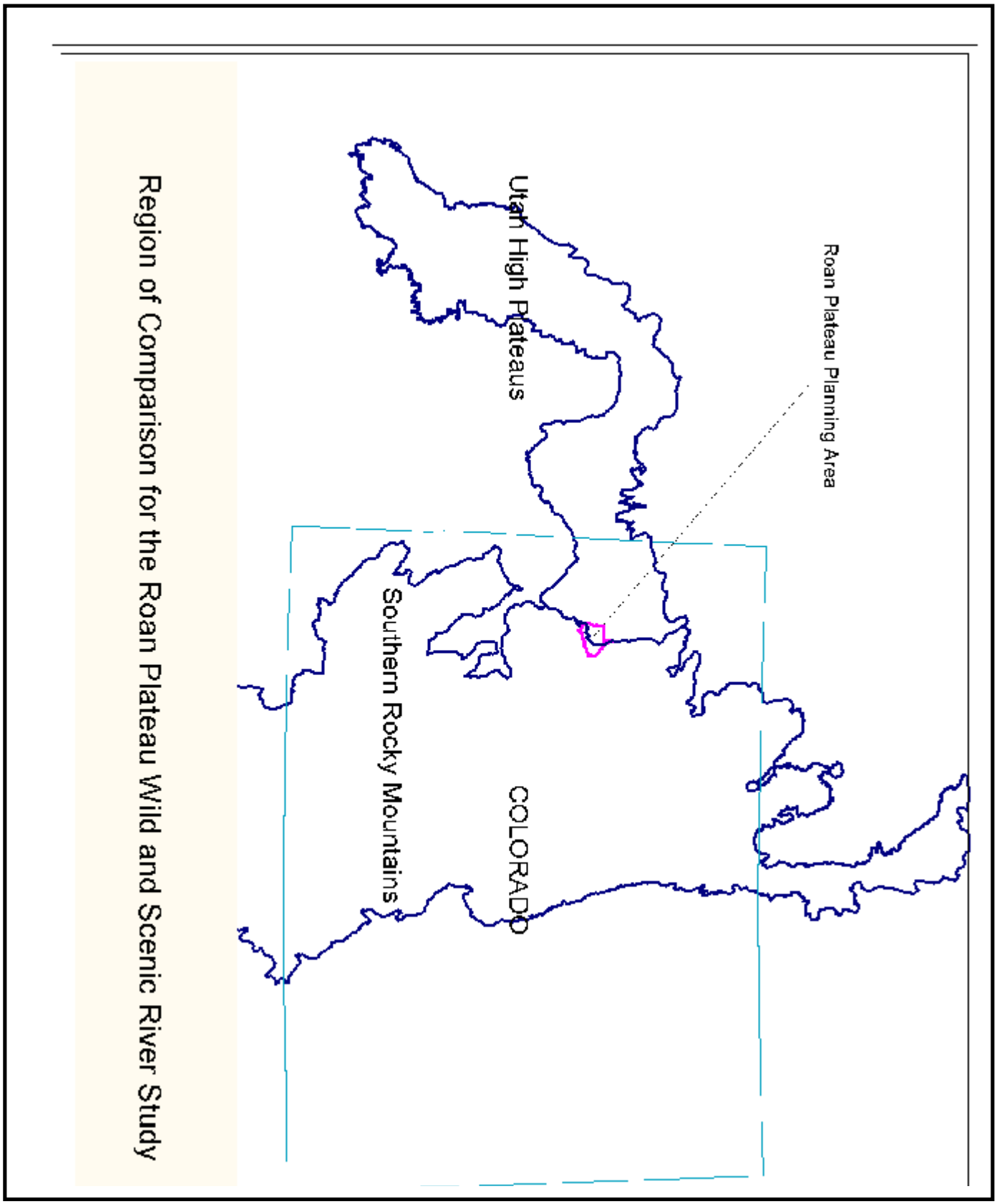
3. Classification Impacts: Management and development of the eligible river and its corridor cannot be modified, subject to valid existing rights, to the degree that its eligibility or tentative classification would be affected. Should a non-suitable determination be made in the RMP process, then the river shall be managed in accordance with management objectives as outlined in the plan document

List of Preparers

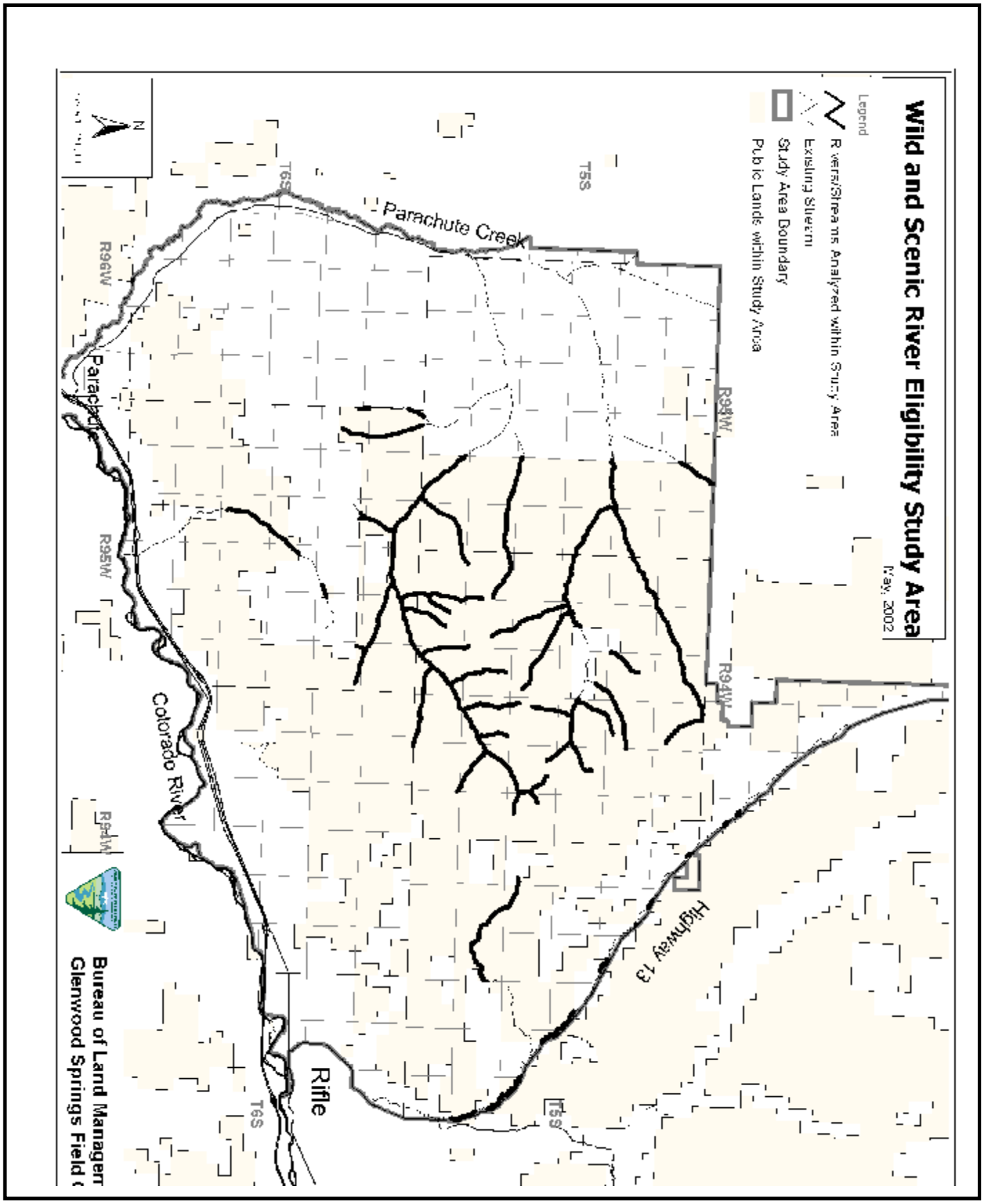
Study Team Members

Name	Title	Responsibilities
Kay Hopkins	Outdoor Recreation Planner	Team leader. Document preparation, Visual Resources
Carla Scheck	Ecologist	Botany
Tom Fresques	Wildlife Biologist	Wildlife and Fisheries
Jim Byers	GIS Specialist	GIS Data, Maps
Cheryl Harrison	Archaeologist	Cultural Resources
Jim Wilkinson	Geologist	Geology
Mike Kinser	Range Conservationist	Range Resources
Brian Hopkins	Community Planner	Recreation Resources
Mike McGuire	Range Conservationist	Soil, Water and Air
Jim Scheidt	Hydrologist	Hydrology, Water Quality

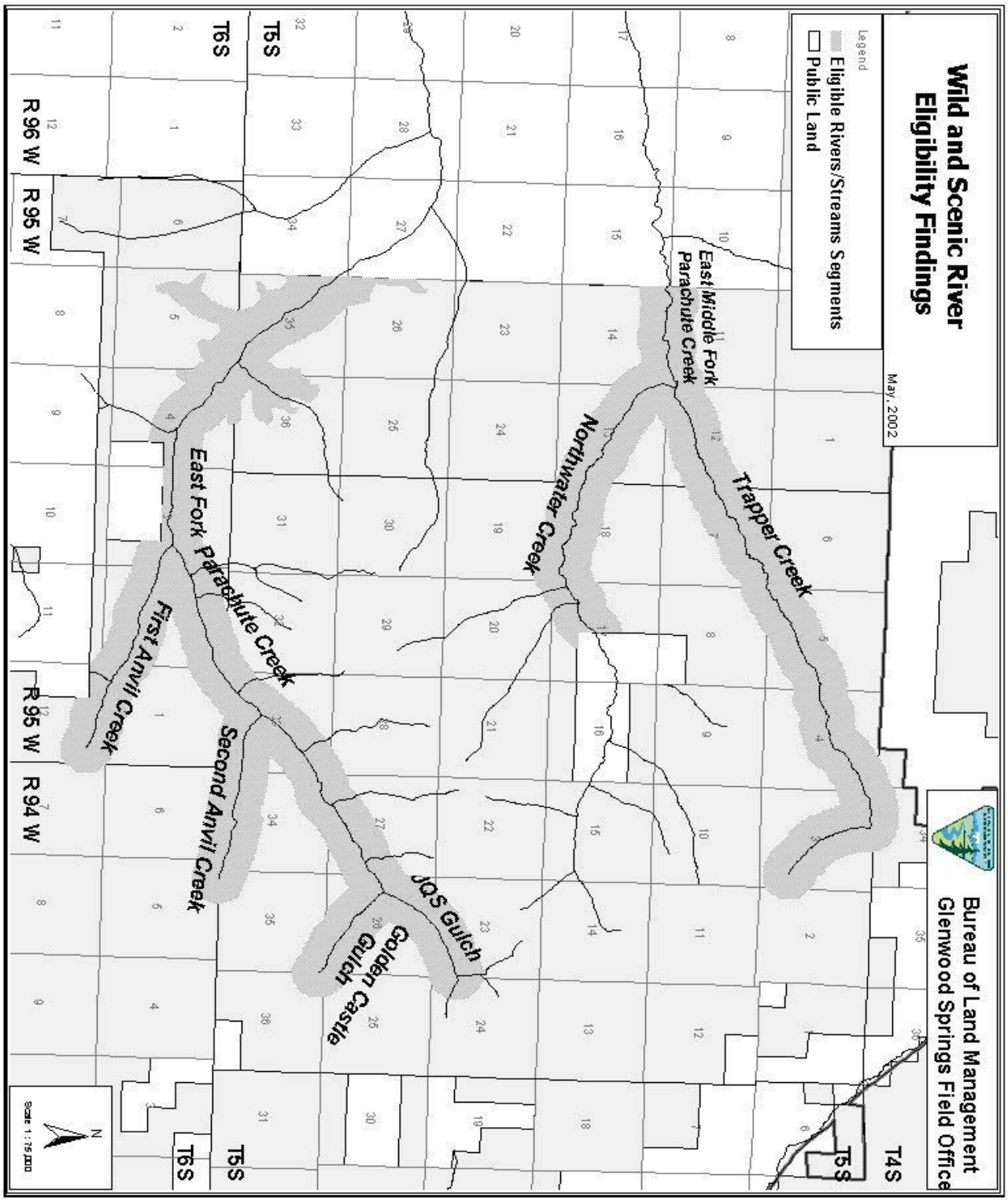
MAP 1.


Region of Comparison for the Roan Plateau Wild and Scenic River Study
Utah High Plateaus
Roan Plateau Planning Area
Southern Rocky Mountains
COLORADO

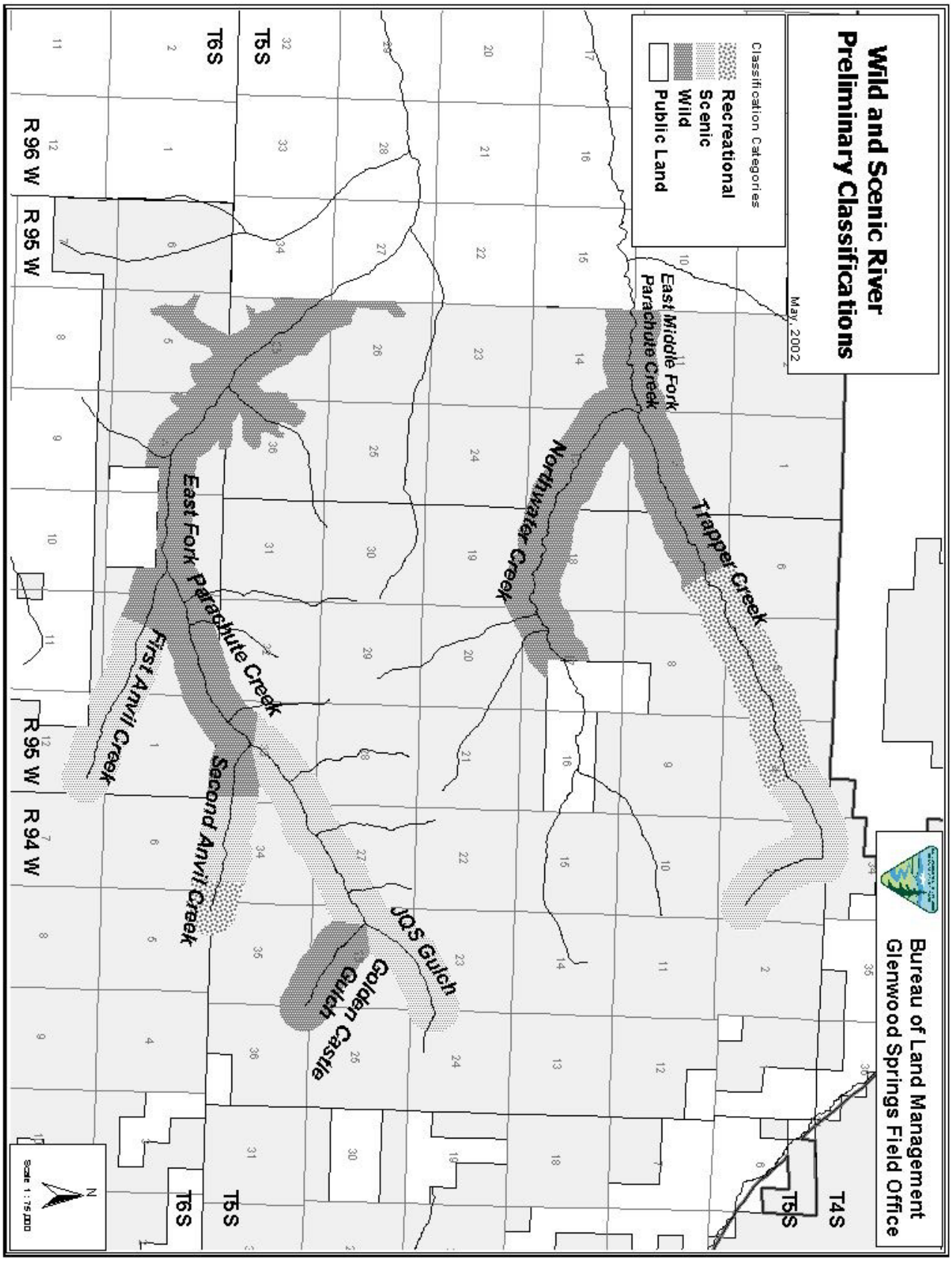
MAP 2.


Wild and Scenic River Eligibility Study Area
May, 2002
Legend
Rivers/Streams Analyzed within Study Area
Existing Stream
Study Area Boundary
Public Lands within Study Area
Parachute Creek
Parachute
Colorado River
Rifle
Highway 13
T5S
T6S
R96W
R95W
R94W
Bureau of Land Manager
Glenwood Springs Field

MAP 3.


Wild and Scenic River
Eligibility Findings
May, 2002
Legend
Eligible Rivers/Streams Segments
Public Land
Bureau of Land Management
Glenwood Springs Field Office
East Middle Fork
Parachute Creek
Trapper Creek
Northwater Creek
East Fork Parachute Creek
First Anvil Creek
Second Anvil Creek
JQS Gulch
Golden Castle
Gulch
T4S
T5S
T6S
R 96 W
R 95 W
R 94 W
N
Scale 1:75,000

MAP 4.


Wild and Scenic River
Preliminary Classifications
May, 2002
Classification Categories
Recreational
Scenic
Wild
Public Land
Bureau of Land Management
Glenwood Springs Field Office
East Middle Fork Parachute Creek
Trapper Creek
Northwater Creek
East Fork Parachute Creek
First Anvil Creek
Second Anvil Creek
JQS Gulch
Golden Castle Gulch
T4S
T5S
T6S
R 96 W
R 95 W
R 94 W
Scale 1:75,000
N